

SEALED MEMBRANE VASCULAR COMPLIANCE DEVICE AND METHOD

ABSTRACT

[00129] The present invention modifies the compliance of a vascular system by providing an elastic member, capable of reducing peak pressure and blood flow from the heart. These embodiments further allow for reduction of peak systolic pressure while increasing diastolic pressure and flow. In one embodiment, the device consists of an anchoring stent, having an elastic member with a passage for blood flow. This device is implanted percutaneously into a desired vessel location. The elastic member begins to “give” when blood pressure reaches a desired level. Additionally, the spring constant of the elastic member may be externally modified to change the compliancy. By precisely modifying the properties of the elastic member, normal arterial compliancy may be restored.